

WHAT IS CLAIMED:

1. A targeted elastic laminate material, comprising:
at least one low tension zone, the low tension zone including a plurality of elastomeric first filaments, the low tension zone having a first basis weight;
at least one high tension zone, the high tension zone including a plurality of elastomeric second filaments, the high tension zone having a second basis weight higher than the first basis weight; and
a facing layer bonded to at least a first side of the low tension zone and a first side of the high tension zone.
2. The targeted elastic laminate material of Claim 1, wherein the second basis weight is at least 10% greater than the first basis weight.
3. The targeted elastic laminate material of Claim 1, wherein the second basis weight is at least 50% greater than the first basis weight.
4. The targeted elastic laminate material of Claim 1, wherein the second basis weight is about 100% to about 800% greater than the first basis weight.
5. The targeted elastic laminate material of Claim 1, wherein the second basis weight is about 125% to about 500% greater than the first basis weight.

6. The targeted elastic laminate material of Claim 1, wherein the second basis weight is about 200% to about 400% greater than the first basis weight.

7. The targeted elastic laminate material of Claim 1, wherein the first basis weight is about 2 gsm to about 14 gsm and the second basis weight is about 10 gsm to about 32 gsm.

8. The targeted elastic laminate material of Claim 1, wherein the first basis weight is about 4 gsm to about 12 gsm and the second basis weight is about 12 gsm to about 30 gsm.

9. The targeted elastic laminate material of Claim 1, wherein the first filaments have a first average thickness and the second filaments have a second average thickness greater than the first average thickness.

10. The targeted elastic laminate material of Claim 9, wherein each of the first average thickness and the second average thickness is about 0.010 inch to about 0.040 inch.

11. The targeted elastic laminate material of Claim 9, wherein each of the first average thickness and the second average thickness is about 0.020 inch to about 0.032 inch.

12. The targeted elastic laminate material of Claim 1, wherein the first filaments have a first frequency and the second filaments have a second frequency higher than the first frequency.

13. The targeted elastic laminate material of Claim 12, wherein the first filaments have a first frequency and the second filaments have a second frequency of about 4 hpi to about 40 hpi.

14. The targeted elastic laminate material of Claim 12, wherein the first filaments have a first frequency and the second filaments have a second frequency of about 12 hpi to about 30 hpi.

15. The targeted elastic laminate material of Claim 1, wherein the low tension zone and the high tension zone are bonded to the facing layer with an elastomeric adhesive.

16. The targeted elastic laminate material of Claim 1, wherein the facing layer comprises an elastomeric meltblown web.

17. The targeted elastic laminate material of Claim 1, further comprising a second facing layer bonded to a second side of the low tension zone and a second side of the high tension zone.

18. The targeted elastic laminate material of Claim 1, wherein the first elastomeric filaments and the second elastomeric filaments comprise a polymer selected from the group consisting of styrene-isoprene-styrene block copolymers, styrene-butadiene-styrene block copolymers, styrene-ethylene/butylene-styrene block copolymers, styrene-ethylene-propylene-styrene-ethylene-propylene tetrablock copolymers, styrene-ethylene-propylene-styrene block copolymers, polyurethanes, elastomeric polyamides, elastomeric polyesters, elastomeric polyolefin homopolymers and copolymers, atactic polypropylenes, ethylene vinyl acetate copolymers, single-site or metallocene catalyzed polyolefins having a density less than about 0.89 grams/cc, and combinations thereof.

19. The targeted elastic laminate material of Claim 1, wherein the first elastomeric filaments and the second elastomeric filaments comprise substantially the same polymer composition.

20. The targeted elastic laminate material of Claim 1, wherein the low tension zone is laterally adjacent to the high tension zone.

21. The targeted elastic laminate material of Claim 1, wherein each of the first facing layer and the second facing layer comprises a material selected from a nonwoven web, a woven web and a film.

22. The targeted elastic laminate material of Claim 1, wherein each of the first facing layer and the second facing layer comprises a spunbond material.

23. The targeted elastic laminate material of Claim 1, wherein the low tension zone has a first tension and the high tension zone has a second tension greater than the first tension.

24. A garment comprising the targeted elastic laminate material of Claim 1.

25. A method of producing a targeted elastic laminate material, comprising the steps of:

extruding a plurality of elastomeric first filaments from a plurality of spinning holes in at least one first spin plate region;

extruding a plurality of elastomeric second filaments from a plurality of spinning holes in at least one second spin plate region, the second filaments having a greater basis weight than a basis weight of the first filaments;

cooling the first and second filaments;

stretching the first and second filaments;

forming a laminate material by adhering the stretched first and second filaments to a first facing material and an opposing second facing material; and

relaxing the laminate material.

26. The method of Claim 25, wherein the first and second filaments are stretched by about the same amount.

27. The method of Claim 25 wherein the first filaments are stretched by a different amount than the second filaments.

28. The method of Claim 25, wherein the first and second filaments are stretched by about 100% to about 800% of an initial length.

29. The method of Claim 25, wherein the first and second filaments are substantially continuous.

30. The method of Claim 25, wherein the first spin plate region has spinning holes with a first diameter and the second spin plate region has spinning holes with a second diameter greater than the first diameter.

31. The method of Claim 25, wherein the first spin plate region has a first frequency of spinning holes and the second spin plate region has a second frequency of spinning holes greater than the first frequency.

32. The method of Claim 25, wherein the cooling step is accomplished by passing the first and the second filaments over a series of chill rolls.

33. The method of Claim 25, wherein the cooling step is accomplished by placing the first and second filaments on a foraminous belt and applying a vacuum through the belt.

34. The method of Claim 25, wherein the stretching step is accomplished by passing the first and second filaments over a series of stretch rolls.

35. The method of Claim 34, wherein the series of stretch rolls comprises a first stretch roll and a second stretch roll, the first stretch roll rotates at a first speed and the second stretch roll rotates at a second speed greater than the first speed.

36. The method of Claim 25, wherein a low tension zone comprises first filaments having a first tension and a high tension zone comprises second filaments having a second tension greater than the first tension.

37. The method of Claim 25, wherein the second filaments form a high tension zone that overlaps a portion of a low tension zone formed by the first filaments.

38. A method of producing a targeted elastic laminate material, comprising the steps of:

extruding a plurality of elastomeric first filaments from a first spinning system having at least one first die, the first die having at least one spin plate region with a plurality of first spinning holes;

extruding a plurality of elastomeric second filaments from a second spinning system having at least one second die, the second die having at least one spin plate region with a plurality of second spinning holes, the second filaments having a greater basis weight than a basis weight of the first filaments;

cooling the first and second filaments;

stretching the first and second filaments;

forming a laminate material by adhering the stretched first and second filaments to a first facing material and an opposing second facing material; and

relaxing the laminate material.

39. The method of Claim 38, wherein the first filaments are cooled by placing the first filaments on a foraminous belt and applying a vacuum through the belt, and the second filaments are cooled by passing the second filaments through a series of chill rolls.

40. The method of Claim 39, wherein the first filaments are stretched by passing the first filaments through a first series of stretch rolls and the second filaments are stretched by passing the second filaments through a second series of stretch rolls.

41. The method of Claim 40, wherein the amount of stretching of the first and second filaments is independently controlled.

42. The method of Claim 38, wherein the first filaments are cooled by passing the first filaments through a first series of chill rolls and the second filaments are cooled by passing the second filaments through a second series of chill rolls.

43. The method of Claim 42, wherein the first filaments are stretched by passing the first filaments through a first series of stretch rolls and the second filaments are stretched by passing the second filaments through a second series of stretch rolls.

44. The method of Claim 43, wherein the amount of stretching of the first and second filaments is independently controlled.

45. The method of Claim 38, wherein the second filaments form a high tension zone that overlaps at least a portion of a low tension zone formed by the first filaments.

46. The method of Claim 38, further comprising the step of aligning the first filaments and the second filaments during the stretching step.

47. The method of Claim 38, wherein a barrier layer is positioned between the first facing material and the second facing material before the laminate material is bonded.

48. The method of Claim 38, wherein the first and second filaments are stretched by about 50% to about 300% of an initial length.

49. A disposable garment comprising a targeted elastic laminate material, the targeted elastic laminate material comprising:

at least one low tension zone, the low tension zone having a plurality of elastomeric first filaments, the first filaments having a first basis weight;

at least one high tension zone, the high tension zone having a plurality of elastomeric second filaments, the second filaments having a second basis weight higher than the first basis weight;

a facing material bonded to at least a first side of the low tension zone and a first side of the high tension zone.

50. The disposable garment of Claim 49, wherein the first and second filaments comprise substantially continuous filaments.

51. The disposable garment of Claim 49, comprising a diaper.

52. The disposable garment of Claim 49, comprising training pants.
53. The disposable garment of Claim 49, comprising swim wear.
54. The disposable garment of Claim 49, comprising absorbent underpants.
55. The disposable garment of Claim 49, comprising a baby wipe.
56. The disposable garment of Claim 49, comprising an adult incontinence product.
57. The disposable garment of Claim 49, comprising a feminine hygiene product.
58. The disposable garment of Claim 49, comprising a protective garment.